S
Insect Control - Modoc
Whitehorse Project

Alturas, California
November 27, 1935

REPORT

ON

WHITEHORSE INSECT CONROL PROJECT

1935 Season

Approved:
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Respectfully Submitted:
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Insect Control - Modoc
Whitehorse Project

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Administrative Use - Modoc
McCloud River Lumber Company
2/7/35

INSECT REPORT

1. INTRODUCTION:

On February 7, 1935 an Administrative Use Agreement between the Shasta National Forest and the McCloud River Lumber Company was effected, permitting the lumber company to cut and remove free of charge, before December 31, 1935 insect infested timber on the area involved in the permit. The object of the permit was to reduce insect infestation in this locality. The Administrative Use permit covers over 14,000 acres but work was done on only slightly over 8000 acres. The administration of this part of the Shasta forest was taken over by the Modoc on April first who handled the active work on the project.

The timber is a Ponderosa Pine type and site IV. Spike tops are common throughout the area. The ground in the main is well suited to logging although considerable rough lava was encountered.

The work on the Whitehorse Insect Control Project was started on April 9, 1935. It covers slightly over 8,000 acres in Townships 41 and 42 N., R. 4 E., between Hole in the Rock and Round Mountain. The exact location is shown on the map accompanying this report.

2. HISTORY:

The history of the insect infestation on this area has been covered in detail by Bureau of Entomology reports. The bark beetle mainly responsible for the damage is the Western Pine Beetle (Dendroctonus brevicomis). The intensity of the infestation has varied widely on this project as elsewhere on the Modoc. The trees this year were infested singly and not in groups as in years of heavy infestation. However, the number of beetles per infested tree was very large.

A few trees were found to be infested by the mountain pine beetle (Dendroctonus monticolae). The flathead beetle (Melanophila gentilis) which is usually quite prevalent in this type of timber was notably rare.

3. ORGANIZATION OF CONTROL WORK:

The basis of cooperation was the Administrative Use Agreement mentioned above. The McCloud River Lumber Company complied with all terms of the agreement and completed the project in a satisfactory manner. They should be complimented on their spirit in carrying out this project.

The crew worked out of the Whitehorse camp and was transferred to and from work in a company truck. There were not over fifteen men on the project at any one time. The spotting on this project was started April 9 and completed May 20. The logging of the infested trees commenced on May 25 and was completed July 10. The Company foreman in charge was Mr. Kenyon Young and the Forest Service representative was William Ellis. Mr. Ellis was paid out of a cooperative fund, put up by the McCloud River Lumber Company. His wages were at the rate of $135 per month which is the Assistant to Technician rating. Ellis also acted as head spotter and bull buck.

The spotting crew consisted of the usual three man crew of one compassman and two spotters. The logging crew was organized as follows:

1 - Foreman
1 - Bull Buck
2 - Fallers
2 - Buckers
1 - limber
1 - Truck Trail builder driver
2 - Loaders
1 - Choker Setter
2 - Tractor Drivers
2 - Truck drivers, with personally owned logging trucks.

4. AMOUNT OF WORK ACCOMPLISHED:

The usual method of spotting in this region was used and the amount spotted on both government and company land amounted to two and one-half million feet of which approximately 2,300 M ft. was salvaged by the company. The only trees that were treated were those that were either too small to make logs or trees that were so rotten that they were unmerchantable. These were treated by peeling and exposing the infested areas to the sun light. The method of logging was as follows:

The bull buck was given a map and located trees for the fallers, and in doing this he scouted the entire area for "pick-ups". The buckers worked closely behind the fallers, so that it was unnecessary for them to have a map of the area.

The standard log length used by the company of 32 feet was used wherever possible. As a rule only one tractor was used in the yarding, although there were times when more than one was on the job. The choker setter was also furnished with a map in order to locate the trees and pick out the necessary roads for the yarding cat. Permanent landings were not used as the yarding cat hauled the logs to convenient locations where they were loaded on trucks. Truck trails were constructed to reach isolated portions of the area so that the yarding distance was seldom more than fifteen hundred feet.

The trucking was done by two "Gypos". The trucks that were used were a White and an International, both equipped with semi-trailers that could haul logs up to forty feet in length. The average load was 5500 feet B.M. Also loads up to 7000 feet were not uncommon. The trucks were loaded by a 60 Cat, using the cross haul system. This was the most efficient method possible under this system of logging due to the wide scattering of the trees. At times landings were rather far a part because of the scattering of trees. The minimum truck haul was three miles and the maximum about twelve. It was only a matter of a few days from the time the trees were felled until they were put in the log pond at McCloud. Some of the bark was knocked off in handling the logs but it was felt that insects in this broken bark would largely be killed by Solar heat.

5. COST OF WORK:

Cost figures on this particular project may tend to give the impression that this method of control is too expensive. However, this high cost is not to be considered the fault of the method. The timber on the area was of a poor quality and the infestation was the lightest that it has been for sometime. Also the equipment used was old and worn out.

The McCloud River Lumber Company kept close cost records on the timber salvaged, and the amount expended from stump to putting logs on the cars amounted to $9.46 per M feet for the 2,300 M ft. salvaged. The company did not segregate the various cost items. The Forest Service had no expenses involved in this project other than that of Forest officers who conducted the usual routine inspection during the time the project was going on. The salary of Mr. Ellis was paid out of funds put up by the McCloud River Lumber Company.

The main difficulty was in obtaining the equipment for logging at the proper time and warm weather had set in when the logging was finally started. Consequently the bugs had abandoned many of the trees before they were felled. One of the high lights of the project was the finding of about 160 "pick-up" trees that were very freshly attacked. It was found in all of these trees that the broods were exceptionally heavy and that the stage of attack was seldom further advanced than the parent adult and egg stage. Because of this, the bark still adhered tightly to the tree and hence little of the bark was lost and practically the entire brood was hauled from the woods.

6. AVERAGE COSTS:

The only cost figures obtainable from the company were those that were given in heading No. 5.

7. CONCLUSION AND RECOMMENDATIONS:

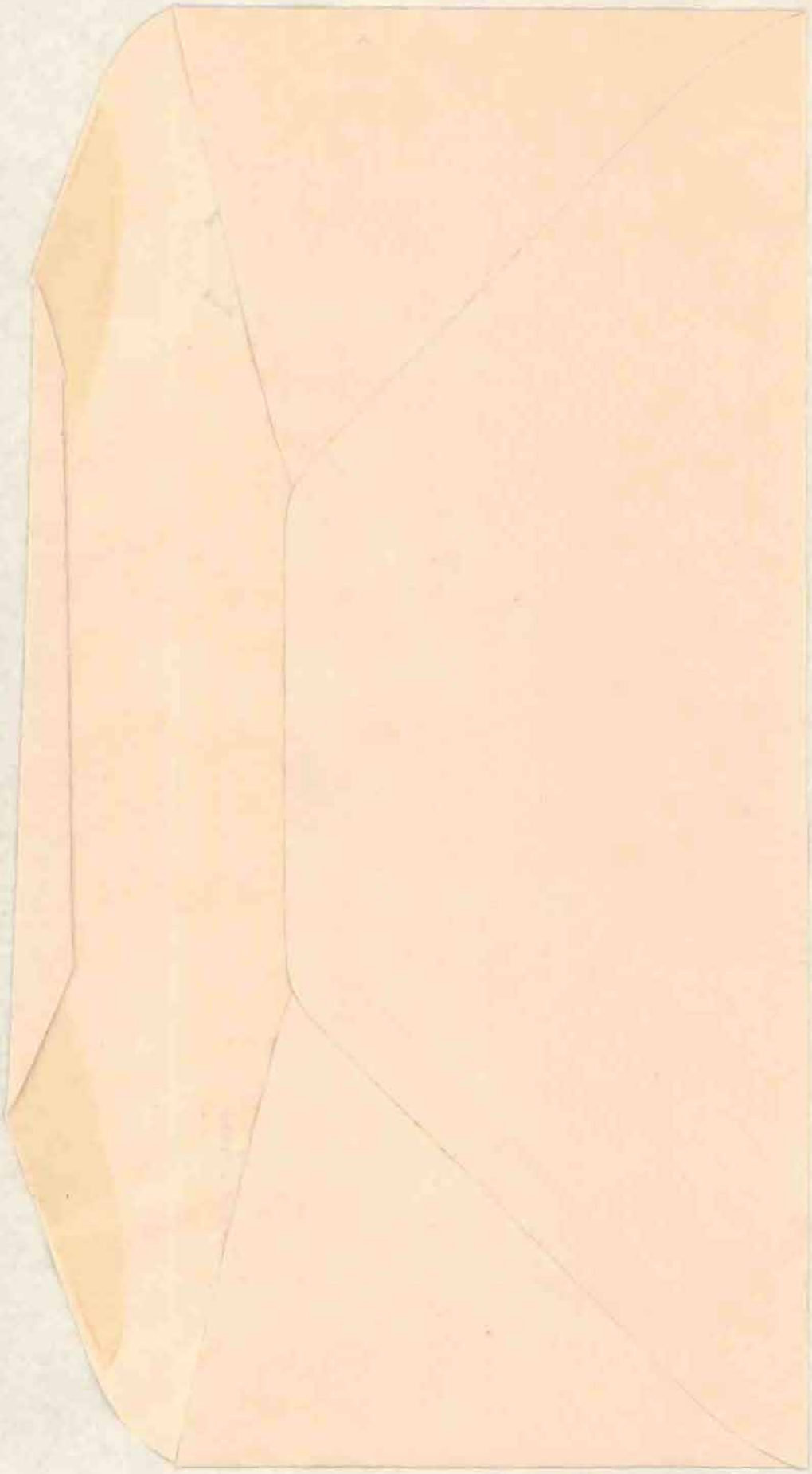
It is the opinion of all who worked on this project that in spite of doubtful results, that under ordinary conditions the salvage method of control would not only be worth while from the entomological viewpoint but also from the financial side which is the point that the operator naturally considers the most important.

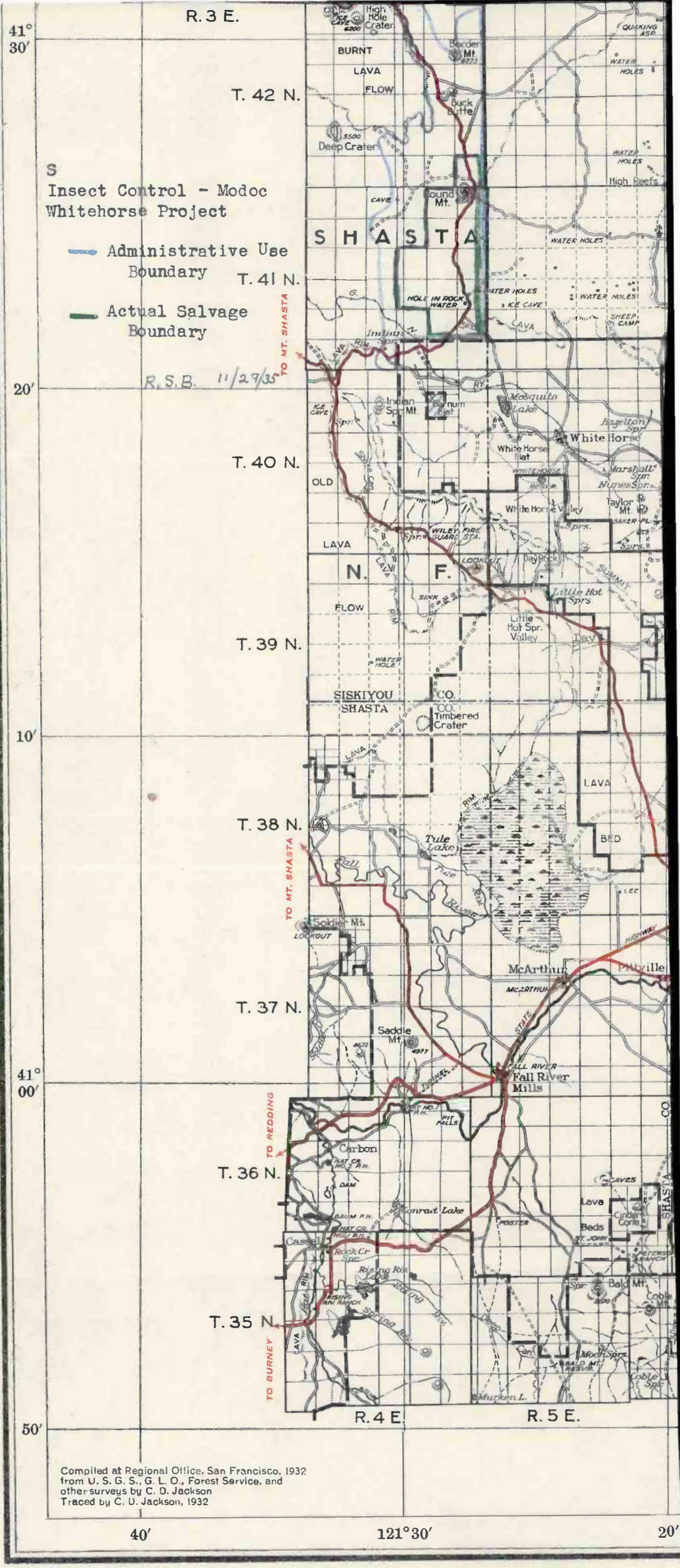
Mr. Andy Jordan, The McCloud cruiser feels that the high costs were due mainly to the fact that old and worn out equipment was used, which caused a large amount of lost time on account of break downs. Another factor that contributed to the high cost was the small size of the timber, the poor quality, and the light infestation.

Evidently the company is still much interested in insect control work on this timber tract because they have a crew at the present time spotting on their own lands. They have not yet decided just how much control work they will carry out during the coming winter, but they were interested enough in control work to call on the Forest Service to recommend spotters to them for work on their own land. Officials of the company have as yet made no commitment regarding further salvage jobs of this character.

The conclusions on this project by the Bureau of Entomology are quoted from Junior Forester Johnson's report of October 22, 1935 as follows:

"Of particular interest was the clean appearance of the area near Whitehorse in which salvage cutting has been carried on during the past summer by the McCloud River Lumber Company. The reduction in infestation in this area was no doubt due in part, at least, to the control effect of the salvage as adjacent stands of similar type to the north of the cutting area apparently did not show such a decline."




R. 3 E.
41° 30′
T. 42 N.
T. 41 N.
20′
T. 40 N.
T. 39 N.
10′
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T. 36 N.
T. 35 N.
50′
R. 4 E.
R. 5 E.
40′
121° 30′
20′
S
Insect Control - Modoc
Whitehorse Project
Administrative Use Boundary
Actual Salvage Boundary
R.S.B. 11/29/35
TO MT. SHASTA
TO REDDING
TO BURNEY
SHASTA
SISKIYOU
BURNT LAVA FLOW
N. F.
LAVA BED
High Hole Crater
Border Mt.
Buck Butte
Deep Crater
Round Mt.
High Reefs
Hole in Rock Water
Ice Cave
Sheep Camp
Indian Spr. Mt.
Mosquito Lake
White Horse
White Horse flat
Hazelton Spr.
Marshall Spr.
Nunes Spr.
Taylor Mt.
White Horse Valley
Wiley Fire Guard Sta.
Day Rock
Lookout
Little Hot Spr.
Little Hot Spr. Valley
Timbered Crater
Tule Lake
Soldier Mt.
McArthur
Pittville
Saddle Mt.
Fall River Mills
Carbon
Dam
Baum P.H.
Conrad Lake
Rock Cr. Spr.
Rising Riv. Ranch
Spring Riv.
Lava Cinder Beds
Caves
Bald Mt.
Moon Spr.
Cable Spr.
Mitchen L.
Compiled at Regional Office, San Francisco, 1932
from U. S. G. S., G. L. O., Forest Service, and
other surveys by C. D. Jackson
Traced by C. D. Jackson, 1932